

CURRENT LITERATURE.

Manual of the Mosses of North America. By Leo Lesquereux and Thomas P. James. Boston: S. E. Cassino & Co., 1884. pp. 447, pl. 6.

The recent publication of this work is an important and valuable addition to our bryological literature, and can not fail to be highly appreciated by those interested in the study of mosses. It is in the form of an octavo of 447 pages, containing descriptions of nearly 900 species of mosses, also a glossary of terms and six plates illustrating the most important genera. All mosses thus far found within the limits of the United States, British America, Alaska and Greenland are fully described; those found in Mexico, although properly within the limit of the work are excluded.

When work on the Manual was commenced, Mr. Lesquereux, owing to failing sight, was obliged to leave the examination of specimens to Mr. James; and after the death of the latter this part of the work was continued and finished by Mr. T. Renaud, an eminent French bryologist. Mr. Sereno Watson also rendered valuable assistance in the work.

The Manual includes the advances made in bryological investigations since the publications of the late Mr. W. S. Sullivant. The classification adopted is mainly according to Schimper. It is to be regretted, however, that the habitats in many instances are deficient and do not represent the well-known ranges of the species. In the following notes I have endeavored to show the omissions. The species referred to from Colorado were collected by Mr. T. S. Brandegee, and are represented in my herbarium; a list of some of these was published in the Botany of the U. S. Geol. and Geog. Survey of the Territories by Hayden, Vol. ii., No. 3.

The varieties *Torreyanum* and *plumosum* of *Sphagnum cuspidatum*, are common in Southern New Jersey. *Sphagnum Lindbergii*, Labrador (Allen). *Sphagnum Austini*, Mass. (Austin); Canada, (Macoun); Green Cove Springs, Fla. (Rau). The first specimens from Florida were sent to me by Dr. G. Martin; vide BOT. GAZETTE, vol. ix., p. 26. During the month of March, this year, I also collected it in Florida. *Sphagnum imbricatum*, Hornsch. 1848, might be mentioned as a synonym. Under *Sphagnum Portericense* is mentioned "fruit unknown"; Dr. Charles Mohr sent me a specimen in fruit from Mobile, Ala. This is, I believe, the first time it has been found fruiting. This species also occurs in Florida. *Sphagnum cyclophyllum* and *sedoides*, Adirondack Mts. (Peck). *Sphagnum Pylæsii*, Labrador (Allen). *Andræa rupestris*, Lehigh Valley, Penn. (Wolle, Rau). The generic name *Micromitrium*, Austin in *Musci Appalach.* 1870, has also been adopted by Schimper for a very different moss from Mexico, vide *Prodromus Bryologie Mexicanae*, par E. Bescherelle, 1871. According to these respective dates, Austin's name would claim priority. Austin, however, proposed to change it to *Sympoma* and Lindberg to *Nanomitrium*, in order to prevent confusion. *Oreoweisia serrulata* is not rare in Pennsylvania, Catskill Mountains, Watkins Glen, N. Y., etc. (Rau). *Rhabdoweisia denticulata* is not rare in the mountains of Pennsylvania and New Jersey (Rau), Mt. Mansfield, Vt., and Ausable Chasm, N. Y. (Pringle). *Cynodontium virens*, var. *serratum*, Colorado (Brandegee). *Dicranella debilis*, Texas (Rau). *Fissidens obtusifolius*, Colorado (Brandegee). *Octoblepharum albidum*, Texas (Rau). *Ceratodon purpureus*, var. *xanthopus*, Colorado (Brandegee). *Eustichia Norvegica*, Lawrence county, Penn. (Lesquereux). *Campylosteleum saxicola*, New Jersey (Austin). *Pottia riparia*, Bethlehem, Penn. (Rau). *Drummondia clavellata*, Canada (Macoun). *Orthotrichum diaphanum*, Colorado (Brandegee). *Discelium nudum*: notwithstanding the fact that I sent specimens to both authors, the habitat is meagerly given. In Austin's *Suppl. to Musci Appalach.* No. 505, the habitat of this moss is given as follows: "Clay banks, Bethlehem, Penn. (Rau); Ohio (Beardslee); also Canada and westward

to Vancouver Island (Macoun);" to which I now add Bingen and Emaus, Penn. (Wolle). *Dissodon splanchnoides* and *Tayloria serrata*, both from Colorado (Brandegge). *Bartramia radicalis*, Narrowsville, Penn. (T. C. Porter, E. A. Rau). *Meesia tristicha*, Pennsylvania (Rau); Vermont (Pringle). The New York habitat of *Paludella squarrosa* should doubtless be credited to C. H. Peck. *Bryum Muhlenbeckii*, White Mountains (Austin); Catskill Mountains (Rau). *Aulacomnion turgidum*, Labrador (Allen). *Atrichum crispum*, Closter, N. J. (Austin). *Cryphæa glomerata*, New Jersey (Austin); Connecticut (Rau). *Neckera oligocarpa*, Colorado (Brandegge) fertile; Catskill Mountains (Austin, Rau). *Fabronia pusilla*, incorrectly labeled *F. octoblepharis* in *Musci Appalach.* No. 535, Del. Water Gap, N. J. (Austin, Rau). *Fabronia Wrightii*, Colorado (Brandegge). *Thelia Lescurii*, New Jersey (Austin, Rau). *Myurella Careyana*, Canada (Pringle) fruiting. *Leskea nervosa*, New York (Austin); Colorado (Brandegge). *Leskea Austini*, Pennsylvania (Rau). *Anomodon viticulosus*, Pennsylvania (Rau). *Pylaisia polyantha*, Colorado (Brandegge). To the habitat of *Cylindrothecium concinnum* add (Brandegge). *Climacium dendroides*, New Jersey, (Austin); New Brunswick (Fowler). *Thuidium pygmaeum*, New Jersey (Austin); Pennsylvania (Rau). *Thuidium paludosum*, Colorado (Brandegge); Connecticut, New Jersey and Pennsylvania (Rau). *Brachythecium acutum*, New York (Peck); New Jersey (Austin); Pennsylvania (Rau). *Brachythecium Utahense*, *velutinum*, and *Fendleri*, Colorado (Brandegge). *Brachythecium reflexum*, Lake Huron region (Mrs. Roy). *Brachythecium Novæ-Angliæ* has certainly a wider range than indicated. *Eurhynchium diversifolium*, Colorado (Brandegge); Pennsylvania (Rau). The *Rhynchostegium demissum* habitat needs revision. *Raphidostegium Novæ-Cesareæ* fruit is *not* unknown, as will be seen by referring to *BOT. GAZETTE*, vol. i., p. 30; fruiting specimens from Stony Creek, Carbon county, Penn., 1874 (Wolle, Rau). *Plagiothecium Mullerianum*, Pennsylvania (Rau). From specimens of *Plagiothecium subfalcatum*, Aust., which I collected at Onoko Glen, the late Mr. Austin was convinced that this species is a form of *Pl. elegans*. *Amblystegium fluviatile*, Pennsylvania (Rau). *Amblystegium compactum*, Colorado (Brandegge). *Hypnum Bergenense*, Aust. is considered identical with *Amblystegium hygrophilum*, Jur. by S. O. Lindberg. *Hypnum nemorosum*, Pennsylvania (Wolle). *Limnobium eugyrium*, Pennsylvania (Wolle, Rau). *Pleurozium Oakesii*, New York and throughout British America (Austin). *Hylacomium Wrightii*, Florida (J. D. Smith). *Zieria julacea*, Colorado (Brandegge).

The following mosses are omitted from the work, although of sufficient importance to be included:

Hypnum thelistegium, C. M., Florida; Aust. *Musci App. Suppl.*, No. 505. *H. homalostegium*, C. M., Alabama (Mohr). *H. occidentale*, S. and L., Oregon (Hall); Sull. *Icon. Musc. Suppl.*, p. 105, t. 81. *Trichostomum macrostegium*, Sull., Alabama (Mohr); Sull. *Icon. Musc. Suppl.*, p. 35, t. 22. *Dicranum Richardsoni*, Hook., Greenland fide James in Kane's *Arctic Explor.*, vol. ii. *Dicranella Canadensis*, Mitt., British America (Drummond, Macoun). According to Sch. *Syn. Musc. Europ.*, the following occur in North America: *Dicranum arcticum*, Schp., Greenland and Labrador; *Tetraplodon mnioides*, vars. *Adamsianus* and *cavifolius*, Arctic regions.—EUGENE A. RAU, *Bethlehem, Pa.*